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[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

**[Docket No. FAA-2016-9550; Directorate Identifier 2016-CE-026-AD]**

**RIN 2120-AA64**

#### Airworthiness Directives; Piper Aircraft, Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Piper Aircraft, Inc. Models PA-31, PA-31-300, PA-31-325, and PA-31-350 airplanes. This proposed AD was prompted by fatigue cracking in the fuselage station (FS) 332.00 bulkhead common to the horizontal stabilizer front spar attachment. This proposed AD would require repetitive inspections to detect cracks in the bulkhead and any necessary repairs. This proposed AD also provides an optional modification if no cracks are found that will greatly reduce the likelihood of the specified cracks. We are issuing this proposed AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Piper Aircraft, Inc., Customer Service, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (877) 879-0275; fax: none; email: customer.service@piper.com; Internet: www.piper.com. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9550; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Gregory "Keith" Noles, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5551; fax: (404) 474-5606; email: gregory.noles@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-9550; Directorate Identifier 2016-CE-026-AD at the beginning of your comments. We specifically invite comments on the overall regulatory,

economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received reports of fatigue cracking in the FS 332.00 bulkhead common to the horizontal stabilizer front spar attachment on Piper Aircraft, Inc. PA-31 airplanes. Cracks in the bulkhead could compromise the structural component's capability to carry flight loads, increasing the potential to overload and fail adjacent structure. This proposed AD also provides an optional modification if no cracks are found that will greatly reduce the likelihood of the specified cracks. We are proposing this AD to detect and repair cracks in the bulkhead that could lead to structural failure and result in loss of control.

### **Related Service Information under 1 CFR part 51**

We reviewed Piper Aircraft, Inc. Service Bulletin No. 1289A, dated October 26, 2016. The service information describes procedures for the repetitive inspections, necessary repairs, and the optional modification of the bulkhead. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

## **Proposed AD Requirements**

This proposed AD would require repetitive inspections to detect cracks in the bulkhead and any necessary repairs. This proposed AD also provides an optional modification if no cracks are found that will greatly reduce the likelihood of the specified cracks. We are proposing this AD to detect and repair cracks in the bulkhead, that could lead to structural failure and result in loss of control.

### **Costs of Compliance**

We estimate that this proposed AD affects 955 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect for cracks in the bulkhead	1 work-hour X \$85 per hour = \$85	Not Applicable	\$85	\$81,175

We estimate the following costs to do any necessary repairs/replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these repairs/replacements:

#### **On-condition costs**

Action	Labor cost	Parts cost	Cost per product
Repair/Modification	26 work-hours X \$85 per hour = \$2,210	\$296	\$2,506

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Piper Aircraft, Inc.**: Docket No. FAA-2016-9550; Directorate Identifier 2016-CE-026-AD.

##### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

##### **(b) Affected ADs**

None.

##### **(c) Applicability**

This AD applies to Piper Aircraft, Inc. Navajo Models PA-31, PA-31-300, and PA-31-325, serial numbers 31-2 through 31-900, and 31-7300901 through 31-8312019; and Chieftain/T-1020 Models PA-31-350, serial numbers 31-5001 through 31-5004, and 31-7305005 through 31-8553002, certificated in any category.

Note 1 to paragraph (c) of this AD: The Model PA-31 may also be identified as a PA-31-310 even though the PA-31-310 is not a model recognized by the Federal Aviation Administration (FAA) on the type certificate data sheet.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5312: Fuselage - Main Bulkhead.

**(e) Unsafe Condition**

This AD was prompted by fatigue cracking in the fuselage station (FS) 332.00 bulkhead common to the horizontal stabilizer front spar attachment. We are proposing repetitive inspections to detect cracks in the bulkhead and any necessary repairs. This proposed AD also provides an optional modification if no cracks are found that will greatly reduce the likelihood of the specified cracks. Cracks in the bulkhead could compromise the structural components capability to carry flight loads, increasing the potential to overload and fail adjacent structure and lead to loss of control.

**(f) Compliance**

Comply with paragraphs (g)(1) through (3) of this AD within the compliance times specified, unless already done.

**(g) Actions**

(1) For airplanes with 3,000 hours time-in-service (TIS) or less as of the effective date of this AD: Initially within 500 hours TIS after reaching 3,000 hours TIS and repetitively thereafter every 200 hours TIS, inspect the fuselage station (FS) 332.00 bulkhead assembly for cracks following the instructions in Part I of Piper Aircraft, Inc. Service Bulletin (SB) No. 1289A, dated October 26, 2016.

(2) For airplanes with over 3,000 hours TIS as of the effective date of this AD: Initially within the next 500 hours TIS after the effective date of this AD and repetitively thereafter every 200 hours TIS, inspect the FS 332.00 bulkhead assembly for cracks, following the instructions in Part I of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016.

(3) If cracks are found during any of the inspections required in paragraphs (g)(1) or (2) of this AD, before further flight, repair the cracks following the modification instructions in Part II of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016, and one of the following as applicable:

(i) If the crack does not extend beyond the inspection / template area of Figure 2 of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016, and meets the minimum acceptable distance in Figure 3 and Table 2 of Part II of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016, then the installation of Piper Kit 88578-001 Revision B, dated June 23, 2016, is acceptable as a repair and is considered terminating action for the repetitive inspection requirement in paragraphs (g)(1) and (2) of this AD.

(ii) If the crack extends beyond the inspection / template area of Figure 2 of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016, or does not meet the minimum acceptable distance in Figure 3 and Table 2 of Part II of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016, then the installation of Piper Kit 88578-001 Revision B, dated June 23, 2016, is not an acceptable repair. You must obtain an alternative method of compliance (AMOC) for any repair or modification in this area. You may contact Piper Aircraft, Inc. for repair instruction development specific to this condition. For contact information refer to paragraph (j) of this AD.

(4) If no cracks are found, you may install Piper Kit 88578-001 Revision B, dated June 23, 2016, on an uncracked bulkhead following the Modification instructions in Part II of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016. Installation of Piper Kit 88578-001 Revision B, dated June 23, 2016, on an uncracked bulkhead is considered terminating action for the repetitive inspection requirement in paragraphs (g)(1) and (2) of this AD.

**(h) Special Flight Permit**

A special flight permit is allowed for this AD per 14 CFR 39.23 with limitations.

Permits are not allowed if cracks are discovered during any inspection following Part I of Piper Aircraft, Inc. SB No. 1289A, dated October 26, 2016. Any cracks found during any inspection must be repaired before further flight.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Gregory "Keith" Noles, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5551; fax: (404) 474-5606; email: gregory.noles@faa.gov.

(2) For service information identified in this AD, contact Piper Aircraft, Inc., Customer Service, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (877) 879-0275; fax: none; email: customer.service@piper.com; Internet: www.piper.com. You may review the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on December 13, 2016.

Robert P. Busto,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

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